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**Enrichment of human corneal epithelial stem/progenitor cells by magnetic bead sorting using SSEA4 as a negative marker.**

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**Public Summary:**

The use of a specific antibody bound to magnetic beads to isolate subpopulations of cells is an efficient and simple technique that allows for the subsequent study of different cell populations. One important use of this isolation technique is the purification of stem cells from a mixed cell population. In this protocol, we describe a method to purify human corneal epithelial stem/progenitor cells or limbal stem cells (LSC), using stage-specific embryonic antigen-4 (SSEA4) as a negative surface marker.

**Scientific Abstract:**

The use of a specific antibody bound to magnetic beads to isolate subpopulations of cells is an efficient and simple technique that allows for the subsequent study of different cell populations. One important use of this isolation technique is the purification of stem cells from a mixed cell population. In this protocol, we describe a method to purify human corneal epithelial stem/progenitor cells or limbal stem cells (LSC), using stage-specific embryonic antigen-4 (SSEA4) as a negative surface marker.

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